

CONTROL MODULE — PMU03



Overview

The PMU03 is a control and supervisory unit designed for use in the Powershell series of DC power solutions. The unit provides all the monitoring and control of the rectifier modules, as well as providing comprehensive battery management and advanced remote communications capabilities. Alarm threshold settings are programmable and alarm outputs are provided through remote communications .

The PMU03 provides a full overview of the system status, meeting the requirements of different operators in the telecom and utility industries, and can also be expanded to accommodate monitoring functions such as battery cell voltage, AC supply parameters, and monitoring of other equipment at the site, such as air-conditioning, fire alarms and others .

functions & features

System

- System Voltage and Total Load current monitoring
- System Voltage Regulation and Bus Voltage Drop Compensation
- Real Time Clock with Supercap backup (no battery to maintain)
- Load Fuse

Battery

- Battery current monitoring (for a range of current sensors)
- Battery & Ambient Temperature Measurement
- Battery Temperature Compensation Charging
- Active Controlled Battery Current Charging (3 battery voltage regions)
- Battery Equalisation/Boost Charging

- Battery Fuse
- Controlled Current Battery Discharge Testing (periodic or manual triggered)
- Control of Low Voltage Battery / Load disconnect

Rectifier

- Rectifier Alarm Threshold programming
- Rectifier Module Current Monitoring
- Rectifier Data retrieval - Serial Number, Internal Temperature

User/ Local Communications Interfaces

- 3 status LEDs for onsite users

Remote Communication Interface

- Isolated RS-232 or RS-485 options for connection to central monitoring room of a plant

available alarms

System

- Mains Failure (detailed Alarms for AC voltage, current)

- Load Fuse
- High Ambient Temperature

- Temperature Sensor Failure
- Excess System Bus Voltage Drop (System Voltage Clamp)

Battery

- Battery Discharge
- High Battery Voltage
- Low Battery Voltage
- High Battery Temperature
- Low Voltage Battery/Load Disconnection

- Battery Fuse

Rectifier

- Rectifier Failure
- Rectifier Communications Failure
- Rectifier Current Limit
- Rectifier Thermal Limit
- Rectifier Overvoltage Protection

Specifications

Input DC

- Voltage 54VDC
- Current 200mA typical at 54VDC
- Polarity reversal protection included.

Environmental

- Operating -40°C to +70°C
- Humidity 0 to 100% RH condensing

- Altitude Operational to 4000m

Mechanical Dimensions

- Width 66.4mm
- Depth 198.8mm
- Height 40.4mm
- Mass <0.5kg